



FORM PTO-1449 (2) and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/823,093		ATTY. DOCKET NO.: M0925.70143US00	
				FILING DATE: April 12, 2004		CONFIRMATION NO.: 3154	
				APPLICANT: Timothy M. Swager et al.			
				GROUP ART UNIT: 1797		EXAMINER: Keri A. Moss	
Sheet	1	of	4				

U.S. PATENT DOCUMENTS

Examiner's Initials #	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication or Issue of Cited Document MM-DD-YYYY
		Number	Kind Code		
	A1	5,629,353		Steckle, Jr. et al.	05-13-1997
	A2	5,710,187		Steckle, Jr. et al.	01-20-1998
	A3	6,509,110		Salbeck et al.	01-21-2003
	A4	6,556,335		Jones et al.	04-29-2003
	A5	6,605,693		Becker et al.	08-12-2003
	A6	6,743,640	A1	Whitten et al.	06-01-2004
	A7	6,962,757		Epstein et al.	03-04-2004
	A8	7,186,355		Swager et al.	03-06-2007
	A9	7,208,122	A1	Swager et al.	04-24-2007
	A10	7,291,503		Swager et al.	11-06-2007
	A11	2002/0177136	A1	McBranch et al.	11-28-2002
	A12	2003/0054413	A1	Kumaraswamy et al.	03-20-2003
	A13	2004/0175768	A1	Kushon et al.	09-09-2004
	A14	2004/0241768	A1	Whitten et al.	12-02-2004
	A15	2005/0014160	A1	Kumaraswamy et al.	01-20-2005
	A16	2006/0024707	A1	Deans et al.	02-02-2006

FOREIGN PATENT DOCUMENTS

Examiner's Initials #	Cite No.	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Translation (Y/N)
		Office/ Country	Number	Kind Code			
	B1	EP	0581058	A1	Hoechst AG	02-02-1994	
	B2	WO	89/00593		Memtec Limited	01-26-1989	
	B3	WO	95/16681		Trustees of the Univ. of Pennsylvania	06-22-1995	
	B4	WO	99/19419	A1	Aventis Research & Tech. GMBH & Co.	04-02-1999	
	B5	WO	00/53655	A1	AXIVA GMBH	09-14-2000	
	B6	WO	01/57140	A1	Massachusetts Institute of Technology	08-09-2001	
	B7	WO	02/16463	A2	Massachusetts Institute of Technology	02-28-2002	

OTHER ART — NON PATENT LITERATURE DOCUMENTS

Examiner's Initials #	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation (Y/N)
	C1	ABRAHAM et al., "Hydrogen bonding. Part 29. Characterization of 14 Sorbent Coatings for Chemical Microsensors using a New Solvation Equation," J. Chem. Soc. Perkin Trans. 1995, 2, 369-378.	
	C2	ACHYUTHAN et al., "Fluorescence Superquenching of Conjugated Polyelectrolytes: Applications for Biosensing and Drug Discovery," J. Mat. Chem. 2005, 15, 2648.	

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/823,093	ATTY. DOCKET NO.: M0925.70143US00
				FILING DATE: April 12, 2004	CONFIRMATION NO.: 3154
				APPLICANT: Timothy M. Swager et al.	
				GROUP ART UNIT: 1797	EXAMINER: Keri A. Moss
Sheet	2	of	4		

C3	AMARA et al., "Synthesis and Properties of Poly(phenylene ethynylene)s with Pendant Hexafluoro-2-propanol Groups," <i>Macromolecules</i> 2005, 38, 9091-9094.
C4	BERGSTEDT et al., "Superquenching of Fluorescent Polyelectrolytes and its Applications for Chemical and Biological Sensing," <i>Proc. SPIE</i> 2001, 4279, 94.
C5	CHEN et al., "Surfactant-induced Modification of Quenching of Conjugated Polymer Fluorescence by Electron Acceptors: Applications for Chemical Sensing," <i>Chem. Phys. Lett.</i> 2000, 330, 27.
C6	CHEN et al., "Tuning the Properties of Conjugated Polyelectrolytes through Surfactant Complexation," <i>J. Am. Chem. Soc.</i> 2000, 122, 9302-9303.
C7	DENG et al., "Direct Observation of the "Pac-Man" Effect from Dibenzofuran-Bridged Cofacial Bisporphyrins," <i>J. Am. Chem. Soc.</i> 2000, 122, 410-411.
C8	FAN et al., "High-Efficiency Fluorescence Quenching of Conjugated Polymers by Proteins," <i>J. Am. Chem. Soc.</i> 2002, 124, 5642.
C9	FAN et al., "Photoluminescence Quenching of Water-Soluble, Conjugated Polymers by Viologen Derivatives: Effect of Hydrophobicity," <i>Langmuir</i> 2003, 19, 3554. Published on Web, 03/19/2003.
C10	FAN et al., "Beyond Superquenching: Hyper-Efficient Energy Transfer from Conjugated Polymers to Gold Nanoparticles," <i>PNAS</i> 2003, 100(11), 6297.
C11	GAYLORD et al., "DNA Hybridization Detection with Water-Soluble Conjugated Polymers and Chromophore-Labeled Single-Stranded DNA," <i>J. Am. Chem. Soc.</i> 2003, 125, 896.
C12	GAYLORD et al., "SNP Detection Using Peptide Nucleic Acid Probes and Conjugated Polymers: Applications in Neurodegenerative Disease Identification," <i>PNAS</i> 2005, 102(1), 34.
C13	GRATE, "Acoustic Wave Microsensor Arrays for Vapor Sensing," <i>Chem Rev.</i> 2000, 100, 2627-2648.
C14	GRATE et al., "Hydrogen Bond Acidic Polymers for Surface Acoustic Wave Vapor Sensors and Arrays," <i>Anal. Chem.</i> 1999, 71, 1033-1040.
C15	HERBICH et al., "Fluorescence Quenching by Pyridine and Derivatives Induced by Intermolecular Hydrogen Bonding to Pyrrole-Containing Heteroaromatics," <i>J. Phys. Chem. A.</i> 2002, 106, 2158-2163.
C16	HOFFMEISTER et al., "Triptycene Polymers," <i>J. Polymer Science</i> 1969, 7, 55-72.
C17	JONES et al., "Tuning of Superquenching in Layered and Mixed Fluorescent Polyelectrolytes," <i>J. Am. Chem. Soc.</i> 2001, 123, 6726.
C17	JONES et al., "Building Highly Sensitive Dye Assemblies for Biosensing from Molecular Building Blocks," <i>PNAS</i> 2001, 98(26), 14769.
C19	KUMARASWAMY et al., "Fluorescent-Conjugated Polymer Superquenching Facilitates Highly Sensitive Detection of Proteases," <i>PNAS</i> 2004, 101(24), 7511.
C20	KUSHON et al., "Detection of Single Nucleotide Mismatches via Fluorescent Polymer Superquenching," <i>Langmuir</i> 2003, 19, 6456.
C21	LEVITSKY, et al., "Rational Design of a Nile Red/Polymer Composite Film for Fluorescence Sensing of Organophosphonate Vapors Using Hydrogen Bond Acidic Polymers," <i>Anal. Chem.</i> 2001, 73, 3441-3448.
C22	LEVITSKY, et al., "Signal Amplification in Multichromophore Luminescence-Based Sensors," <i>J. Phys. Chem. B</i> , 2001, 105, 8468-8473.
C23	LIU et al., "Homogeneous Fluorescence-Based DNA Detection with Water-Soluble Conjugated Polymers," <i>Chem Mater.</i> 2004, 16, 4467.
C24	LIU et al., "Optimization of the Molecular Orbital Energies of Conjugated Polymers for Optical Amplification of Fluorescent Sensors," <i>J. Am. Chem. Soc.</i> 2006, 128, 1188.
C25	LIU et al., "Methods for Strand-Specific DNA Detection with Cationic Conjugated Polymers Suitable for Incorporation into DNA Chips and Microarray," <i>PNAS</i> 2005, 102(3), 589.
C26	LU et al., "Superquenching in Cyanine Pendant Poly(L-lysine) Dyes: Dependence on Molecular Weight, Solvent, and Aggregation," <i>J. Am. Chem. Soc.</i> 2002, 124(3), 483.
C27	LU et al., "Surface-Enhanced Superquenching of Cyanine Dyes as J-Aggregates on Laponite Clay Nanoparticles," <i>Langmuir</i> 2002, 18, 7706.

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/823,093	ATTY. DOCKET NO.: M0925.70143US00
				FILING DATE: April 12, 2004	CONFIRMATION NO.: 3154
				APPLICANT: Timothy M. Swager et al.	
				GROUP ART UNIT: 1797	EXAMINER: Keri A. Moss
Sheet	3	of	4		

	C28	LU et al., "Biocidal Activity of a Light-Absorbing Fluorescent Conjugated Polyelectrolyte," <i>Langmuir</i> 2005, 21, 10154.	
	C29	LU et al., "'Cyanine Pendant' Polymers on Nanoparticles and in Solution; Superquenching and Sensing Applications," <i>Polym. Mat. Sci. Eng.</i> 2002, 86, 17.	
	C30	LU et al., "Self-Assembled 'Polymers' on Nanoparticles: Superquenching and Sensing Applications," <i>Polymer Preprints</i> , 2002, 43, 124.	
	C31	MARTIN, et al., "Picosecond Laser Photolysis Studies of Deactivation Processes of Excited Hydrogen-Bonding Complexes. 2. Dibenxocarbazole-Pyridine Systems," <i>J. Phys. Chem.</i> 1982, 86, 4148-4156.	
	C32	MCGILL, et al., "Choosing polymer coatings for chemical sensors," <i>Chemtech</i> 1994, 24, 27-37.	
	C33	MIYASAKA, et al., "Femtosecond-Picosecond Laser Photolysis Studies on the Mechanisms of Fluorescence Quenching Induced by Hydrogen-Bonding Interactions - 1-Pyrenol-Pyridine Systems," <i>J. Phys. Chem.</i> 1993, 97, 8222-8228.	
	C34	PATEL, et al., "Chemical capacitive microsensors for volatile organic compound detection," <i>Sensors and Actuators B</i> , 2003, 96, 541-553.	
	C35	PINNADUWAGE, et al., "Detection of 2,4-dinitrotoluene using microcantilever sensors," <i>Sensors and Actuators B</i> , 2004, 99, 223-229.	
	C36	RININSLAND et al., "High-Throughput Kinase Assays with Protein Substrates Using Fluorescent Polymer Superquenching," <i>MBC Biotech.</i> 2005, 5, 16.	
	C37	RININSLAND et al., "Metal Ion-Mediated Polymer Superquenching for Highly Sensitive Detection of Kinase and Phosphatase Activities," <i>PNAS</i> 2004, 101(43), 15295.	
	C38	THOMAS, III et al., "Conjugated Polymer Sensors: Design Principles Towards Enhanced Versatility," presented at the Army Science Conference, December 2004.	
	C39	THOMAS, III et al., "Conjugated Polymer Sensors: Detection of DMNB and Hydrazine," presented to the American Chemical Society at the 230 th National Meeting, Washington, D.C. (28 August - 1 September 2005).	
	C40	THOMAS, III et al., "Conjugated Polymer Sensors: Detection of DMNB and Hydrazine," presented at the Materials Research Symposium, Boston, MA (December 2005).	
	C41	THOMAS, III et al., "Amplifying fluorescent polymer sensors for the explosives taggant 2,3-dimethyl-2,3-dinitrobutane (DMNB)," <i>Chem. Commun.</i> 2005, 4572-4574.	
	C42	THOMAS, III et al. "Trace Hydrazine Detection with Fluorescent Conjugated Polymers: A Turn-On Sensory Mechanism," <i>Adv. Materials</i> 2006, 18, 1047-1050.	
	C43	WALUK, "Hydrogen-Bonding-Induced Phenomena in Bifunctional Heteroazaaromatics," <i>Acc. Chem. Res.</i> 2003, 36, 832-838.	
	C44	WANG et al., "Fluorescein Provides a Resonance Gate for FRET from Conjugated Polymers to DNA Intercalated Dyes," <i>J. Am. Chem. Soc.</i> 2004, 126, 5446.	
	C45	WANG et al., "Photoluminescence Quenching of Conjugated Macromolecules by Bipyridinium Derivatives in Aqueous Media: Charge Dependence," <i>Langmuir</i> 2001, 17, 1262.	
	C46	WANG et al., "Photoluminescence of Water-Soluble Conjugated Polymers: Origin of Enhanced Quenching by Charge Transfer," <i>Macromolecules</i> 2000, 33, 5153.	
	C47	WANG et al., "Biosensors from Conjugated Polyelectrolyte Complexes," <i>PNAS</i> 2002, 99(1), 49.	
	C48	WHITTEN et al., "From Superquenching to Biodetection: Building Sensors Based on Fluorescent Polyelectrolytes," Chapter 4, <i>Optical Sensors and Switches</i> , New York: Marcel Dekker, 2001.	

FORM PTO-1449/A and B (modified PTO/SB/08) INFORMATION DISCLOSURE STATEMENT BY APPLICANT				APPLICATION NO.: 10/823,093	ATTY. DOCKET NO.: M0925.70143US00
				FILING DATE: April 12, 2004	CONFIRMATION NO.: 3154
				APPLICANT: Timothy M. Swager et al.	
				GROUP ART UNIT: 1797	EXAMINER: Keri A. Moss
Sheet	4	of	4		

C49	XIA et al., "Applications of Fluorescent Polymer Superquenching to High Throughput Screening Assays for Protein Kinases," Assay and Drug Dev. Tech. 2004, 2, 183.	
C50	XIA et al., "A High-Throughput Screening Assay for Kinases and Phosphatases via Metal Ion-Mediated Fluorescent Polymer Superquenching," American Laboratory 2004, 36, 15.	

EXAMINER:	DATE CONSIDERED:
-----------	------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

*a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. _____, filed _____, and relied upon for an earlier filing date under 35 U.S.C. 120 (continuation, continuation-in-part, and divisional applications).

[NOTE – No copies of U.S. patents, published U.S. patent applications, or pending, unpublished patent applications stored in the USPTO's Image File Wrapper (IFW) system, are included. See 37 CFR §1.98 and 1287OG163. Copies of all other patent(s), publication(s), unpublished, pending U.S. patent applications, or other information listed are provided as required by 37 CFR §1.98 unless 1) such copies were provided in an IDS in an earlier application that complies with 37 CFR §1.98, and 2) the earlier application is relied upon for an earlier filing date under 35 U.S.C. §120.]